SAN ANTONIO MILITARY LIFE SCIENCE COMMERCIALIZATION CHARTER



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1. Background and Charter Purpose

Background:

The City of San Antonio and the San Antonio Economic Development Corporation (SAEDC) seek to better leverage military medical research opportunities for commercialization. To do so, they formed a Military Life Science Working Group of local industry, research institute, academic, and military leaders in 2017. A full list of members can be found in Appendix A. Following initial discussions with the Working Group, the City set out to investigate a plan for maximizing local resources and propel the commercialization of military relevant products. Following a call for proposals, in January 2018, a team from Teresa Evans LLC was hired to develop a strategy and Action Plan. The plan – published in September of 2018 – provides a path for the community to promote entrepreneurial opportunities by creating a new formal alliance between defense, educational, and private entities in San Antonio. This new alliance will leverage the significant military medical research industry in San Antonio in order to create new life science companies, jobs, and mutual partnerships.

The Action Plan recommends implementation in two phases. Phase I was to determine potential near-term commercialization opportunities, establish partnerships between the military and community medical research entities, align key government and community stakeholders, and develop this Charter. Phase II will introduce a San Antonio Military Medical Innovation (SAMMI) Position to support implementation of the Charter and coordinate the development of a local Alliance to provide long-term sustainability and funding for the project.¹

This Charter was prepared for the SAEDC by Teresa Evans LLC.

The purpose of this Charter is to:

- Outline an approach toward greater ecosystem alignment.
- Define high-level structure and expectations for an Alliance.
- Serve as the platform to identify willingness of stakeholders to express support for the Alliance and the SAMMI Position.
- Clearly state the Charter mission statement and value propositions.

Successful Implementation of this Charter will:

- Lead to enhanced exchange of information among military medical organizations and San Antonio community, research and industry leaders
- Identify opportunities for new life science growth through local asset mapping
- Result in increased long-term investment in infrastructure, life science jobs, and economic growth
- Support new business development via business relocations to San Antonio, new local startup companies, as well as the successful growth and expansion of existing companies

This Charter represents the foundation upon which the next phase of the San Antonio Military Life Science Commercialization Action Plan can continue to be executed. Its creation arises from the continued support of the San Antonio economic development community and life science stakeholders. Through a structured process to identify community value propositions and best practices for collaboration, this Charter seeks to set expectations and lay the foundation for a successful position and Alliance, by outlining agreed-upon objectives.

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¹ https://www.sanantonio.gov/gpa/News/ArtMID/24373/ArticleID/13855/San-Antonio-Military-Life-Science-Commercialization-Action-Plan

Initial San Antonio Military Life Science Commercialization Project Approach

This Charter outlines the proposed structure for an Alliance

THIS CHARTER WILL ADDRESS:

- 1 How we as a community effectively facilitate commercialization through maximizing local resources.
- How we entrench this *Military Life Science Commercialization Strategy* into a sustainable ecosystem within San Antonio.
- Best practices for the *Military and Community Life Science Stakeholders* to engage in effective partnerships.

CHARTER GOALS

To outline "best practices" toward the ecosystem alignment toward commercialization opportunities

To establish a *roadmap* of military life science commercialization

Proposed Charter Conditions:

The proposed San Antonio Military Life Science Charter represents the recommended structure and implementation plan based on the findings of The Action Plan and activities up to the time of this document. The successful implementation of this Charter depends on the following assumptions and constraints.

Assumptions:

- City of San Antonio and community stakeholders continue to be a leader in Military Life Science Research.
- City of San Antonio Economic Development Corporation hires and supports a San Antonio Military Medical Innovation (SAMMI) Director.
- The SAMMI Director has the trust and respect of DoD Partners.
- The SAMMI Director is allowed access to DoD research activities and personnel.
- Working Group members remain engaged in effective communication.
- City of San Antonio continues to support life science industry growth.
- Community stakeholders and Working Group members will facilitate the initiation and execution of the Alliance laid out in this Charter.

Constraints:

- Funding sources for position are currently limited and dependent upon government funding to ensure effective DoD engagement and the establishment of the SAMMI Director position.
- Identifying and recruiting a qualified individual to fill the SAMMI Director position.
- Potential stakeholder burnout resulting from over-engagement and burdensome requests.
- Limitations on access to ever changing DoD medical research landscape.

2. San Antonio Life Science Commercialization Alliance

2.1 Alliance Mission & Vision

Mission

Support the increased commercialization of military medical solutions through innovation, the alignment of community partners and resources, and coordinated, effective communication between the DoD and civilian stakeholders.

Vision

Align stakeholders by identifying individual strengths and capabilities, resulting in actionable outcomedriven opportunities for the San Antonio Life Science ecosystem.

Why a San Antonio Military Life Sciences Alliance?

Known as "The Home of Military Medicine," San Antonio is also home to a myriad of equally excellent life science companies, research institutions, hospitals, and non-profit entities. A recent study on the economic impact of San Antonio's healthcare and bioscience industry estimated over \$40 billion in annual economic impact to the city's economy in 2017, with \$4 billion contributed by the military medical activities². The combination of the military medical strength and the broad array of capabilities within the San Antonio life science sector represents a strong core around which to align these resources and expertise. Thus, a local "Alliance" offers a way to jointly leverage and maximize opportunities within military medical innovation by aligning stakeholders and resources to develop and foster mission-relevant commercialization. Furthermore, this Alliance would build off of and sustain the momentum started by the regular meeting and engagement of the Military Life Science Commercialization Working Group members.

Through the creation of an Alliance and resulting mutually augmented capacity, it is envisioned that a coordinated San Antonio Military Life Science ecosystem would support an increase in local company formation and retention, resulting in new job creation and overall growth of the local ecosystem.

How is this Alliance unique? This Alliance is a key representation of the capabilities, assets, and strengths within the San Antonio Life Science Community that would support partnerships and collaborations across the ecosystem and with military medical research units. The Action Plan identified a "lack of knowledge and lack of communication" as the most deterring factors to building effective partnerships with military medical research entities. Therefore, the Alliance will enable the effective disbursement of knowledge amongst members and aid efficient communication, in part, supported by the City's investment in a San Antonio Military Medical Innovation (SAMMI) Director.

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² https://www.sachamber.org/wp-content/uploads/2018/11/HealthcareBioscienceEIS_2018_web.pdf

Empowered by the knowledge consolidated in the creation and maintenance of an Alliance Membership & Resource Catalog, the SAMMI Director will serve to catalyze greater commercialization by identifying specific opportunities within local military missions and the general ecosystem in which Alliance Member Organizations could have strategic advantages by collaborating through shared resources and/or strengths.



2.2 Alliance Value Propositions

In order to align the San Antonio Life Science Ecosystem around this shared vision, the structure and purpose of the Alliance must provide redeeming value to each of the entities involved. The following Value Propositions were derived by gathering information from stakeholders across the Military, Research Institutions, Private Industry, Non-profit, and Academic sectors who may become strategic Alliance members. Some of the key overlapping Value Propositions are listed below.

Knowledge of Military Needs

Echoed by the prior Action Plan, many of the community entities remain interested in learning more about military medical needs and gaps, in order to drive application-focused research and development to meet mission requirements. Additionally, industry partners expressed similar curiosity, with the goal of helping provide commercial solutions through technology commercialization. Thus, the Value Proposition proposed by the Alliance will be two-fold: (1) continue to facilitate local conversations among industry, research institutes, and the public sector around military medical mission-needs and (2) distill available information into a centralized language that can be clearly understood and appreciated across life science sectors.

Awareness of Opportunities and Innovations

There still exists a significant gap in awareness of the opportunities available for partnership, funding, and commercialization, both inside and outside the DoD. The gathering and consolidation of available opportunities, ongoing research, and current innovations/technologies aligned with the mission and vision of the Alliance will provide a valuable resource to members by increasing their relative opportunity pool (i.e. "deal flow") while decreasing time and resources spent both curating relevant opportunities and refining applicable information.

Knowledge of Capabilities/Resources

Lack of knowledge was identified in The Action Plan as the most pressing overall detractor of successful DoD medical partnerships and commercialization pathways. While ongoing communication among community stakeholders has made progress towards addressing this detractor, the substantial capabilities and resources that exist within the local San Antonio Life Science Ecosystem are too broad to be appropriately captured by relying solely on person-to-person communication. Consequently, the consolidation of various entities' capabilities and resources in a centralized and organized fashion would provide significant value by overcoming this marked gap. Additionally, through the identification of available resources and capabilities, existing gaps will become more apparent and can be leveraged as potential areas of expansion, investment or recruitment.

Subject Matter Expertise

Many of the entities in the San Antonio Life Science Ecosystem have unique assets in personnel and/or teams with significant subject matter expertise. This expertise can be in specific clinical disciplines, manufacturing practices, engineering design, business development, military operations, or other areas of interest. By acknowledging the experts and interested mentors in each of these fields, the Alliance can help to augment the capabilities of its members by enabling and facilitating connections with local and recognized experts in a particular subject matter.

Pathways for Commercialization

While Military Medical Research generates great innovation via the creation of knowledge and material products, they are greatly limited in their capacity to develop and field these products independently. Thus, partnering with civilian stakeholders represents a key value proposition for the military medical research stakeholders in harnessing the capacity to sustainably commercialize and field needed innovations and technologies. Additionally, community stakeholders benefit from working with military partners on mission-relevant products by realizing novel applications and markets for research, development, and/or existing technologies

Ultimately, as a result of these Value Propositions, the Alliance will enable DoD and civilian entities to recognize **mutually beneficial partnerships** aligned with the mission of the Alliance and the military medical research community. In coordination with the SAMMI Director, the Alliance will provide curated and consolidated access to relevant information to help Alliance Members and DoD partners engage in stronger and more strategic partnerships that support commercialization of new technologies and military missions. Not only will these mutually beneficial partnerships augment each of the involved parties, but will also serve to represent the San Antonio Military Life Science Ecosystem as a competitive entity on a national and international scale.

2.3 Alliance Membership & Resource Catalog

The San Antonio Military Life Science Alliance will be united through a central catalog that will serve the purpose of providing a "roadmap" through which members can navigate and share the various resources, capabilities, individuals, and entities within the Alliance. Furthermore, the compilation of relevant events and opportunities will allow Alliance Members to align communication strategies and joint efforts. By having Alliance members responsible for the orchestration of data curation, the catalog will capture the nuances of members' strengths and present all information in a centralized language to enable clear communication across sectors and community partners. This centralized communication will also help to translate and distill opportunities and decrease the barrier of interpretation and submission of strategic community partnerships toward greater coordination and tech commercialization.

Membership

Membership in the Alliance will be denoted by the registration in the centralized catalog, as described in the Membership & Resource Catalog Information, Section 2.4. below. Catalog information will only be accessible to other Member Organizations registered within the Catalog and will be captured through a standardized interview process (Section 2.5 below).

2.4 Membership & Resource Catalog Information

Overall, the catalog will involve three primary sections to include Member Organizations, Opportunities, and Events. The sections below provide a brief text describing the key categories and components of the catalog, while Appendix B provides an example of a hypothetical MO entry.

2.4.1 Member Organizations

Member Organizations (MOs) may be institutions or organizations within the San Antonio Life Science Ecosystem with an interest in and capabilities to contribute to the growth of the San Antonio Life Science Commercialization sector. As a part of initial registration (Section 2.5 below), the MO will provide relevant information that will be maintained (Section 2.6) in order to be considered a continuing member. Ideally, the catalog would be easily searchable using any one of the key categories (Personnel, Capabilities, Resources, Core Competencies, Interests, Requests for Collaboration). While the present catalog descriptions focus on MOs as institutions or organizations, there also exists value in allowing individuals with valuable services (i.e. financial, legal, business development, engineering design, etc.) or expertise (i.e. CEO, CFO, clinical expertise, etc.) to enlist as members. Recommended inclusion of this structure is further described under Scaling Recommendations (Section 2.7), below, in order to allow for the initial framework of the Alliance Membership & Resource Catalog to be developed and scale appropriately.

Departments

This section shall include all the relevant "departments" within the Member Organization's internal structure. While the MO may have differing terminology than "department", these are to be functional units with differing personnel, capabilities, resources, core competencies and interests as described below. For example, an Academic Institution may have different Colleges, then Departments while a Corporation may have different Divisions or Teams. Eventually, with the incorporation of Individual Members (Catalog Scaling, Section 2.7), an Individual wishing to register as an MO may present as "Individual Contractor", "CEO", or "CFO" based upon relevant interests or targets.

Personnel

Each "Department" shall have a primary director or chair who represents the point of contact (POC) for the catalog, and thus, the Alliance. Additional key personnel, such as team members or researchers, may be listed under the Department. The MO shall at least notify all personnel listed that they have been named in the catalog and must receive permission to include additional contact information. Personal information is not a mandatory registration requirement. The purpose of this will be to have transparent awareness, where possible, of POCs, researchers, employees, or relevant personnel in order to decrease the communication barrier.

Capabilities

Capabilities listed shall include relevant skills, knowledge expertise, areas of research, products, services, technologies, or additionally valuable contributing information attributed either to the department or a person within. Examples may include software development, new product evaluation, injection mold manufacturing, 3D printing, market analysis, government contracting, stem cell research, large/small animal models, medical specialties, etc. These will be listed in a standardized language based on its relationship with and understanding of each MO.

Resources

Resources listed shall include machines (ex. MRI, microscopes, 3D printers, bioreactors, etc.), infrastructure, laboratories, external database access (ex. market research databases, clinical research libraries, etc.), or other specialized equipment relevant to life science research and development. These are to highlight MO's technical capacity that may be relevant to collaborating toward life science and commercialization initiatives.

Core Competencies

Each MO will choose no more than 8 top "core competencies" to streamline their listed strengths. These should highlight the assets, efforts, services, or products that the MO wishes to promote within the Alliance and will be captured through personal interviews and relationships with the MO's POC in order to fully appreciate the nuanced strengths of the MO.

Areas of Interest

Each MO will choose their top "areas of interest" to represent the top efforts in which the MO is currently interested. These will serve to emphasize MO's current target goals or efforts, and can change at the request of the MO or during the routine updates (Maintenance, Section 2.2.6)

Requests for Collaboration

As an optional section, the MO may choose to list specific requests for collaboration or assistance in which it would be interested in partnering with another Alliance MO. These may include research proposals, manufacturing needs, clinical expertise, market analysis, animal models, etc. Each request for collaboration will be coordinated with the Catalog Manager and must have a POC attached to it such that other interested MO's may reach out to the appropriate contact at the requesting MO.

2.4.2 Opportunities

A separate directory, alongside MOs, will encompass available opportunities for research and development funding, competition, or collaboration. Examples may include calls for proposals (CDMRP, BAA, NIH, SBIR/STTR, SAMF, etc.), technology competitions (JLABS, MassChallenge), pitch competitions (PTEF, Venture Pipeline), or available local consortia looking for a specific partner. Section 5.3 includes a more detailed compilation of initial suggested opportunities to include and routinely update as a part of the City position's coordination with the Alliance (SAMMI Implementation, Section 5). Member Organizations may also submit Opportunities for publication within the catalog.

2.4.3 Events

The Events section will include a list of relevant conferences, industry days, networking events, luncheons, or other gatherings relevant to the Alliance community, either locally or nationally. Section 5.3 includes an initial recommended list of current events and the relative frequency at which they occur. Similar to opportunities, MOs may submit events they are hosting, attending or interested in for listing in the Events section. The MO can also work with the Alliance members to strategically coordinate any Event to maximize impact in the community (Life Science Community Partner Engagement, Section 4.1.3, SAMMI Implementation, Section 5).

2.5 Registration and Onboarding of New MOs

Initial registration and Onboarding of new Member Organizations in the Alliance will be facilitated through "Intake Interviews" which should be implemented by a central coordinator chosen by the Alliance, such as administrative support or a catalog manager. The standardization and centralization of this process will ensure consistent collection of the relevant information. The new MO will also receive a consistent message regarding the Alliance mission, value propositions, and implementation. Additionally, the MO will designate a primary POC regarding catalog information inquiries and the ongoing maintenance of updated information. An example intake entry is show in Appendix B.

2.6 Maintenance

Maintenance of status as a Member Organization in the Alliance will be contingent on maintaining updated and accurate information in the catalog. The MO's designated catalog POC will provide at least quarterly updates to the listing information in the catalog, while more frequent updates are welcomed.

2.7 Catalog Scaling

One of the greatest values of the proposed Alliance Membership & Resource Catalog includes its ability to scale with the maturity of the Alliance and the San Antonio Life Science ecosystem. While the above proposal outlines the foundational structure of the envisioned Alliance Membership & Resource Catalog, we recognize that the initial phase will be to establish the foundation and the future growth will involve increased expertise and resources to create tailored modifications and additions to align with the Alliance Member Organizations' needs. The following represent initial growth considerations as well as potential future additions based on the interest of the Member Organizations and the relative capacity to support and maintain the integrity and value of the information.

2.7.1 Catalog Initiation

To begin, an initial subset of consolidated opportunities and assets within the City of San Antonio's life science ecosystem will be available through the SAMMI Director's Local Asset Mapping (See Knowledge Preservation and Local Asset Mapping, Section 5.2). This initial Local Asset Mapping by the SAMMI will serve as the publicly available foundation upon which the Alliance Membership & Resource Catalog can build. In order to build out a supplementary Alliance Membership & Resource Catalog platform, it will be crucial to plan for the appropriate support of scaling and maintenance of the Catalog. Thus, the Alliance should consider the hiring of a catalog manager or appointment of a centralized curator to adequately establish and maintain the information in the catalog. The catalog manager could be funded, fully or in part, by Alliance Members. No strategic advantage will be given to paying or non-paying entities. Additionally, appropriate software platforms will need to be considered in order to ensure data efficiency and privacy, such as purchasing established software, contracting the creation of a platform, or hosting a "challenge", such as a CivTech Event, to open up the opportunity to community developers. As much as possible, existing resources and capabilities within the community should be leveraged, first, to prevent redundant efforts. As much as possible, Alliance Members should leverage developed resources existing within the community as a basis upon which to expand the catalog. Examples may include registries from BioMed SA, SAMF, or other internal knowledge management structures that various Alliance Members may possess to curate their own organizational structures.

2.7.2 Registration of Individuals

While the catalog information descriptions, above, tend to apply more to Institutions or Organizations, there could be value in individuals registering as Members. Such individuals would possess a specific expertise that could be useful to other entities' or individuals' life science commercialization initiatives. For example: private contractors with design/engineering expertise, executives with business development and management expertise, consultants with strategic marketing expertise, lawyers with patent or tax expertise, doctors with clinical expertise, etc. These individuals should still engage in the same Intake Interview process to ascertain that the data maintains the centralized language and that the Alliance Membership stays true to the mission statement and vision.

2.7.3 Registration of Mentors

Similar to the above recommendation of individuals as members, enabling registration of interested mentors would also provide a natural complement. A call for greater access to local mentorship was a finding from The Action Plan and would provide additional benefit to inclusion within the Alliance such that there exists a clearly defined joint alignment through the mission and vision statements. Such individuals would still engage in the intake process to ensure alignment and clarify the individual's particular area of mentorship (i.e. business development, clinical experience, market analysis, etc.). Particular distinction should be paid to differentiate which Individuals are registering as mentors versus the aforementioned (Section 2.7.1) registration as an Individual Contractor, Consultant, or Executive.

2.8 Data Privacy

As a City resource, the initial Local Asset Mapping of the SAMMI Director will be publicly available. With the expansion of this to build an Alliance Membership & Resource Catalog, the additional information included therein should be private among the Alliance Members to protect informational privacy of the Member Organizations during the initial growing stages. This privacy also preserves the value provided by membership in the Alliance. However, decisions made regarding the relative privacy of information should be made jointly among the Alliance members and Member Organizations should still maintain the right to keep any particular data elements private.

3. Letter of Support

The following is a sample Letter of Support received representing the collective stakeholder support of the content of this Charter. The goal of Phase I execution of The Action Plan was to determine potential near-term commercialization opportunities, establish partnerships between the military and community medical research entities, align key government and community stakeholders, and develop a Charter. As a show of support and expression of alignment toward these initiatives and the mission outlined in this Charter, key stakeholders in the San Antonio Life Science Community have been asked to sign the following letter.

Mr. Rene Dominguez
Director, Economic Development Department
City of San Antonio
100 W. Houston, Suite 1900
San Antonio, TX 78205

Dear Mr. Dominguez:

As a member of our community's Healthcare and Bioscience Industry, I am pleased to submit this letter on behalf of the [Insert Organization Name Here], indicating our strong support for adoption of the proposed San Antonio Military Life Science Charter.

This Charter clearly defines our expectations for the establishment of a community stakeholder Alliance and a full-time San Antonio Military Medical Innovation (SAMMI) Director to help leverage military medical research for the mutual benefit of the military and San Antonio. We believe that for San Antonio to be recognized as a leader in life science commercialization, and more specifically, as a leader in developing products aligned with military mission requirements, we must work together to establish real-time solutions that facilitate ongoing collaboration and communication with the Department of Defense.

The mission of the Alliance is to facilitate partnerships and communicate the capabilities of stakeholders within the San Antonio Life Science commercialization community. This will serve to align stakeholders and highlight individual strengths and capabilities to ensure that the life science ecosystem has a shared path forward.

We appreciate the leadership that the City's Economic Development Department and the San Antonio Economic Development Corporation have undertaken to improve our military life science commercialization ecosystem. We also applaud your initiative to establish and help fund the SAMMI Director position. Once the Alliance and SAMMI Director are in place, we anticipate increased engagement between Alliance Members and the DoD medical research community, ultimately resulting in an increase in commercialization of innovations that will improve the lives of both our military and our community members.

We are honored to be a part of Military City USA and to continue to support the growth of our city through the support of our military and life science innovation.

Sincerely,

Community Partners

4. Recommendations for SAMMI Structure

4.1 Positional Structure

The Action Plan recommended the establishment of a full-time San Antonio Military Medical Innovation (SAMMI) position to serve as liaison between the military and community in order to catalyze life science innovation and commercialization. The Action Plan recommended that this position be aligned with local military medical missions to meet the specific needs of our war fighters, providing a unique value to stakeholders and increasing the potential for commercialization of military relevant innovations.

4.1.1 Government Alignment and Organizational Structure

An essential element to an effective positional structure is to align the SAMMI Director position with a governmental entity, with particular attention to funding for the role originating from governmental dollars. This will ensure effective and efficient communication with DoD partners.

We propose that the position be housed within the San Antonio Economic Development Corporation (SAEDC) to achieve this goal and report to the Executive Director of the SAEDC.

4.1.2 Military Partner Engagement

As previously emphasized, fluid communication between the SAMMI Director and military partners will be essential for the successful implementation of the position and in assisting the military mission. The Action Plan identified that a critical element of this successful relationship will involve the SAMMI Director having access to the military bases in order to engage with military partners effectively, attend seminar series, and stay updated on the DoD priorities. The following represent key attributes of effective engagement between the SAMMI Director and military partners in order to facilitate commercialization of products supporting military missions:

- Support for the SAMMI Director's attainment of military base access.
- Timely responsiveness on inquiries and meeting coordination.
- Maintenance of accurate information about current missions and efforts.
- Open communication around ongoing innovations and research.
- Cooperation to facilitate the translation of technology to field warfighter solutions.
- Notification of planned community events.

4.1.3 Military Tech Transfer Hours

In order to promote the exchange of information across the community and Military Life Science Ecosystem, the Working Group and Tri-Service Life Science leadership have suggested that the SAMMI Director facilitate routinely scheduled meeting times where representatives from the Tri-Services Life Science technology commercialization programs are available to meet with interested community members. These meetings will be scheduled in advance around community members' expressed interest in meeting with a particular branch's representative and/or researcher(s) regarding a mission-relevant collaboration or effort. The City will also support these meetings by providing a neutral venue to which all parties have easy access. Meeting time slots may be initiated by military partners who request specific collaborative interests to the SAMMI Director. In response to these requests, appropriate community members could then sign up via the SAMMI Director for a meeting. These institutions may include San Antonio Economic Development Department, Texas Research and Technology Foundation, Texas Biomedical Institute, and Southwest Research Institute.

4.1.4 Life Science Community Partner Engagement

Strong communication between the SAMMI Director and life science community partners will be critical for the effective translation of mission-relevant needs or innovations into productive collaborations or commercialization efforts. The following represent key attributes of engagement between the SAMMI Director and life science community partners in order to achieve this aim

- Timely responsiveness to inquiries and meeting coordination.
- At least quarterly updates on accurate and current technologies, research aims, and main efforts.
- Notification of planned community events.
- Designation of a primary POC with whom the SAMMI Director will correspond regarding Alliance matters

4.2 SAMMI Steering Committee Recommendations

The SAEDC Board should consider establishment of a Steering Committee to support the SAMMI Director. This will be crucial to support the SAMMI Director's integration with the local Life Science Ecosystem. Committee members should represent military, research institutions, and private industry in addition to selected members of the SAEDC board. The initial recommended Steering Committee should engage those Working Group members that have been significantly involved in the continuation of The Action Plan and this present Phase I Implementation. Additionally, a primary purpose of the Steering Committee will be to continue to shepherd the formalization of the Alliance.

4.3 Proposed Funding Strategy

Initially, the position should be funded by the City of San Antonio and the San Antonio Economic Development Corporation (SAEDC) with the primary goal of having the position quickly established and operating. It is important to ensure that the position has an opportunity to develop a strong foundation as an impartial representative of our community and, therefore, initial funding by the City and structural alignment under the SAEDC are warranted. Given this constraint on the nature of the funds supporting the SAMMI position, it is recommended that state and/or federal funds be pursued as an effective avenue for ongoing support or in the event of necessary office expansion. One organization that has expressed interest in collaboration on this topic is the Texas Healthcare and Bioscience Institute (THBI).

4.3.1 Proposed 3 Year Budget

SAMMI Position Budget	Year 1	Year 2	Year 3
Total Salaries and Benefits	125,000	137,500	150,000
Relocation Costs (one-time)	20,000		
Office supplies	1,000	1,000	1,000
Finance/Accounting & Legal	5,000	5,000	5,000
Web Site Development	5,000	1,000	1,000
Catering/Events	2,000	2,000	2,000
Training & Travel	20,000	20,000	20,000
Total Operating Expenses	178,000	166,500	179,000
TOTAL THREE-YEAR BUDGET FORECAST		\$523,500	

4.3.2 Public Private Partnership

Long term, the position should be funded through a Public Private Partnership (PPP) in order to ensure future sustainability. Many key stakeholders and institutions support the Mission of this position and Alliance (See Letter of Support) and we recommend that the City engage stakeholders for financial support via contributions to the San Antonio Economic Development Corporation (SAEDC). The value of this opportunity is that the public partners will be able to benefit from supporting the SAMMI Director's contribution to the San Antonio community, at large, without jeopardizing the ability of the SAMMI Director to work in a non-biased fashion with DoD Partners. Ideally, funding could also be raised from philanthropic partners or non-Alliance Members interested in supporting the economic development of San Antonio Military Life Science Ecosystem. This would provide even further protection between the activities of the SAMMI and the benefits from Alliance partnerships.

Overview of Public Private Partnership Structure to ensure position funding remain governmental aligned:

The City of San Antonio and/or San Antonio Economic Development Corporation Should Provide Funding for:

- Salary and Benefits*
- Office Space
- Staff Support
- Finance/Accounting & Legal*
- Oversight (Executive Director)

Private Partner(s) Should Consider Providing Supplemental Funding to the City/SAEDC for:

- Training & Travel Support*
- Computer/Technology/Software
- Database Management/Web Site Development *
- Catering/Events*
- Office Supplies*

^{*}denotes alignment with line items in budget, above

5. SAMMI Director Position Implementation

5.1. Community Support

The SAMMI Director's primary mission is to serve as a community steward enabling fluid communication toward actionable military life science commercialization initiatives. Thus, the activities of the SAMMI Director, as it pertains to engagement with Military and Life Sciences Community Partners, will primarily be to assist with the alignment of ongoing initiatives and effective community partnerships. The following are some identified activities that have been expressed by key stakeholders as beneficial to the life science commercialization community at large.

5.1.1 Life Science Community Events

With the ever-increasing activity of San Antonio industry, life science, and military partners, the coordination of various entities hosting individual and joint institute events (i.e. conferences, "industry days", "capabilities days, annual gatherings) becomes critical in ensuring that each event preserves integrity and maximizes impact across the community. Thus, the SAMMI Director shall support this coordination by serving to both communicate upcoming events and assisting in the organization of such events. Activities may include: date coordination, venue choice, attendee list recommendations, and/or speaker identification.

5.1.2 Focused Discussions

"Focused Discussions" have been proposed as a potential mechanism for joint brainstorming among community partners toward a solution around a particular military mission or innovation need. The SAMMI Director would facilitate such gatherings by working closely with the military medical partners to understand the expressed purpose or desire and communicating with the appropriate community partners who would be beneficial participants for solution development. In some situations, the SAMMI Director may also assist in the coordination of venue space for hosting a neutral, third-party discussion when appropriate.

5.1.3 Military Tech Transfer Hours

"Military Tech Transfer Hours" have been proposed as a pathway for communication around particular military innovations or community-driven mission-relevant solutions and would involve a specific military person, involved in the technology transfer pathway, meeting with a community member around a particular innovation or expressed interest. These differ from the "focused discussions" in that they are one-on-one meetings around a specific innovation, project, or commercialization-focused collaboration effort. The SAMMI Director shall facilitate such meetings by assisting in the coordination of times that the military technology transfer personnel will be available and communicating the availability to the interested community member(s) for the purpose of signing up with available time slots. The SAEDC and/or City of San Antonio may also assist in the facilitation of space outside of the military base to provide a neutral venue with easier access to community partners.

5.1.4 Neutral Collaboration Identification and Facilitation

Part of the SAMMI Director's value as a communication facilitator will be to serve as a steward to the San Antonio Life Science Community. The SAMMI Director's strong working knowledge of both life science technologies and military mission needs will help identify and support viable partnerships among military and community partners. Simultaneously, the SAMMI Director will maintain third-party independence by maintaining open communication of all available opportunities to the community, atlarge.

5.2 Knowledge Preservation and Local Asset Mapping

As a part of the community engagement with both DoD and non-DoD partners, the SAMMI Director should maintain a data repository to preserve the knowledge they obtain through community landscape conversations. This local asset mapping will facilitate the SAMMI's collaboration identification and facilitation across the life science community. Furthermore, the maintenance of the gathered data will serve as a consolidated resource of various institutions and capabilities in the San Antonio Military Life Science Ecosystem.

5.3 SAMMI Director Interface with Alliance

A critical function of the SAMMI Director will be to interface with the Alliance while maintaining a neutral, third-party position within the City and/or SAEDC as the facilitating entity between DoD and non-DoD partners. To achieve this, the following represent key attributes for balancing these relationships between Alliance members while maintaining stewardship to the Community at-large.

Support to the Alliance Contributions:

- Help Populate catalog with the publicly available asset mapping, events, and opportunities as outlined in Section 5.2, above.
- Help identify strategic partnership opportunities of Alliance Member Organizations and facilitate introductions.
- Engage in discussions with new members or community partners as part of local asset mapping:
 - o The development of relationships with and first-hand appreciation of each MO.
 - o The integration of Member Organizations into local asset map.
 - Share language used for local asset map to ensure alignment with catalog information.

Community Engagement:

- Announce upcoming Community Events.
- Serve as a resource to the community to facilitate Life Science and Military partnerships, independent of Alliance membership.
- Serve as a knowledge resource to the San Antonio community regarding available opportunities, events, and technologies in the San Antonio Military Life Science community.
- Facilitate introductions requested through Alliance members.
- Serve as a liaison for San Antonio Military Life Science innovation by attending National conferences and events relevant to the aforementioned Mission Statement.

5.4 SAMMI Initial Reference Lists:

Local Events

- Community Stakeholder Industry/Capabilities and/or Research Days
- MilMedTech Commercialization Summit
- San Antonio Military Health System & Universities Research Forum (SURF)
- Health Cell Luncheons
- Venture Pipeline Luncheons
- San Antonio Entrepreneurship Week
- RegenMed SA
- UT Health SA Postdoc Forum
- BioMed SA Annual Dinner/Breakfast
- Health Cell State of the Industry
- UT Health SA Science Technology Investor Reception (STIR) Events
- Texas Healthcare and Biosciences Institute (THBI) Events

National Events

- Military Health System Research Symposium
- Medical Technology Enterprise Consortium (MTEC) Membership Annual Meeting
- AMSUS, The Society of Federal Health Professionals
- Defense TechConnect
- BIO International Convention
- Special Operations Medicine Scientific Assembly (SOMSA)
- U.S. Army's Global Force Symposium and Exposition

Funding Announcements

- Broad Agency Announcement (BAA)
- SBIR/STTR
- San Antonio Medical Foundation (SAMF)
- Congressionally Directed Medical Research Program (CDMRP)
- Medical Technology Enterprise Consortium (MTEC)
- MassChallenge Texas Opportunities
- JLABS QuickFire Challenges
- Expeditionary Technology Search (xTechSearch)

6. Appendix A

San Antonio Military Medical Life Science Working Group

- City of San Antonio Economic Development Department
- · City of San Antonio Office of Military Affairs
- San Antonio Economic Development Corporation
- UT Health San Antonio/Military Health Institute
- University of Texas San Antonio
- Texas Biomedical Research Institute
- Southwest Research Institute
- BioBridge Global/Gencure
- Texas Research and Technology Foundation/Velocity TX
- BioMed SA
- San Antonio Economic Development Foundation
- Acelity L.P., Inc.
- InCube Labs San Antonio
- Prytime Medical Devices
- Trauma Insight LLC
- Metis Foundation
- U.S. Army Institute of Surgical Research
- 59th Medical Wing
- Naval Medical Research Unit San Antonio

7. Appendix B

Example Alliance Membership & Resource Catalog Intake Member Organization: Example Life Science Company, Inc. Department: Strategic Marketing Personnel

Sally Mae (title, contact) John Joe (title, contact)

Capabilities

Market Analysis – Consumer electronics, Wearables, Medical Devices Focus Group Facilitation
Market Forecast Generation
Strategic Recommendations

Resources

Consumer Electronics Market Research Database Medical Device Industry Reports

Department: Technology Evaluation
Personnel

Susan Crow (title, contact)
Joseph Brown (title, contact)

Capabilities

Hardware feasibility assessment Software architecture recommendations Medical applicability

Department: Pitch Development Personnel

Mitchell Smith (title, contact) Mary Hall (title, contact)

Capabilities

Communication coaching Graphic development Presentation development

Resources

Photoshop
Graphic development software

Core Competencies

- 1. Market Analysis [consumer electronics, wearables, medical devices]
- 2. Technology feasibility evaluation
- 3. Strategic marketing recommendations
- 4. Funding Pitch Development
- 5. Custom Graphic Development

Areas of Interest

- 1. Medical Devices
- 2. Strategic Marketing
- 3. Consumer Electronics
- 4. Wearables